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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,095	06/20/2003	Tom Erik Lia	3491.1000-000	9764
21005	7590	07/22/2005	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			CHAN, WING F	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/601,095	LIA ET AL.	
	Examiner	Art Unit	
	Wing F. Chan	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2, 4, 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 2, when the "at least two sites" as recited in claim 1 is taken as being two sites only would render claim 2 vague and indefinite since as there is only two sites and when one connected site disconnect there is no longer any conference connection and the claim would have no meaning.

The above discussion also applies to claim 4 in the case that there is two sites and one connected site disconnect would terminate the conference and no more composite video signal is present.

Art Unit: 2643

Claims 6-8 are vague and indefinite in that what is meant by "CP4, CP9, and CP16"?

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 18, 19, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Rogers et al (US PAT. NO. 6,346,964 hereinafter Rogers).

As to claim 1, Rogers discloses a conferencing method comprising connecting at least two sites (e.g. 201, 202, 203, Fig. 5), defining a composite image layout based on the number of sites connected in the conference or the number of received video signals or both, processing the received video signals to provide a composite image (e.g. see Figs. 5, 8B, col. 10 line 12 to col. 14 line 12), transmitting the composite image to the connected sites.

As to claims 18, 19, 23, the broadband data switch 250 reads on the claimed multipoint control unit for conferencing comprising an interface (e.g. MD) for receiving video from at least two sites (e.g. see Fig. 2A), control processor 257, video processor

Art Unit: 2643

254, and the defined conference parameter reads on the composite image layout shown in Figs. 5, 8B.

6. Claims 1, 18, 19, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai et al (US PAT. NO. 6,288,740 hereinafter Lai).

As to claim 1, Lai discloses a conferencing method comprising connecting at least two sites (e.g. Fig. 7), defining a composite image layout based on the number of sites connected in the conference or the number of received video signals or both, processing the received video signals to provide a composite image (e.g. see Figs. 6, 8, col. 5 line 45 to col. 9 line 58), transmitting the composite image to the connected sites.

As to claims 18, 19, 23, see MCU 10 shown in Fig. 1, col. 3 line 16 to col. 4 line 43 for example.

7. Claims 1, 18, 19, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Terui et al (US PAT. NO. 6,124,881 hereinafter Terui).

As to claim 1, Terui discloses a conferencing method comprising connecting at least two sites (e.g. Fig. 1), defining a composite image layout based on the number of sites connected in the conference or the number of received video signals or both, processing the received video signals to provide a composite image (e.g. see Figs. 4-18I, col. 2 line 25 to col. 9 line 13), transmitting the composite image to the connected sites. Also see [0071-0082] for example.

As to claims 18, 19, 23, see MCU 130 shown in Figs. 1-4 and its corresponding description for example.

8. Claims 1, 18, 19, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Loui et al (US PAT. NO. 5,764,277 hereinafter Loui).

As to claim 1, Loui discloses a conferencing method comprising connecting at least two sites (e.g. Figs. 5, 7, 8), defining a composite image layout based on the number of sites connected in the conference or the number of received video signals or both, processing the received video signals to provide a composite image (e.g. see Fig. 8, col. 4 line 14 to col. 8 line 22), transmitting the composite image to the connected sites.

As to claims 18, 19, 23, see MCU 310 and its corresponding description for example.

9. Claims 1, 18, 19, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nelson et al (US PUB. NO. 2004/0008635 hereinafter Nelson).

As to claim 1, Nelson discloses a conferencing method comprising connecting at least two sites (e.g. Fig. 4), defining a composite image layout based on the number of sites connected in the conference or the number of received video signals or both, processing the received video signals to provide a composite image (e.g. see Figs. 6-8, 12-14, sections [0049, 0053, 0063, 0065]), transmitting the composite image to the connected sites. Also see [0071-0082] for example.

Art Unit: 2643

As to claims 18, 19, 23, see MCU 130 shown in Fig. 5 , sections [0048, 0049, 0052, 0053] for example.

10. Claims 1, 18, 19, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Yona et al (US PUB. NO. 2003/0123537 hereinafter Yona).

As to claim 1, Yona discloses a conferencing method comprising connecting at least two sites (e.g. [0031]), defining a composite image layout based on the number of sites connected in the conference or the number of received video signals or both, processing the received video signals to provide a composite image (e.g. see Figs. 2-3, sections [0014, 0033, 0036-0054]), transmitting the composite image to the connected sites. Also see [0057-0128] for example.

As to claims 18, 19, 23, see MCU 100 shown in Fig. 1 , sections [0029-0033] for example.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 2643

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 2-5, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers.

As to claim 2, see Figs. 5, 8B that show the conference with 5 sites and 3 sites, thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rogers to change the composite image layout such that when the connected sites change from 5 sites to 3 sites, for example the composite image would change from Fig. 5 to that of Fig. 8b, since the two other sites are no longer in the conference and it would allow the remaining conferees to view each other and know who is remaining in the conference.

As to claim 3, see Figs. 5, 8B that show varies composite image layout for the conference with 5 sites and 3 sites, thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rogers to change the composite image layout when the connected sites change from 3 to 5, for example the composite image would change from Fig. 8b to that of Fig. 5, or when there is a new site to be added in order to accommodate the added conferees to allow the viewing of all the people attending the conference to provide a face-to-face environment.

As to claims 4, 5, 14-17, the above discussion regarding claims 2, 3 also apply and are incorporated by reference herein. Furthermore, the parameters read on the various composite image layout configurations as shown in Figs. 5, 8B.

14. Claims 2-5, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loui.

As to claims 2, 3, Loui discloses the conference system can accommodate up to twelve users (e.g. col. 3 lines 26-59) thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Loui to change the composite image layout when the connected sites (users) increases or decreases in order to reflect such changes and to allow the remaining conferees to view each other and know who is remaining in the conference.

As to claims 4, 5, 14-17, the above discussion regarding claims 2, 3 also apply and are incorporated by reference herein. Furthermore, the parameters read on the various composite image layout configurations as shown in Figs. 5, 8B.

15. Claims 2-5, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yona.

As to claims 2, 3, Yona discloses the conference system can dynamically change the screen layout during the conference (e.g. [0033, 0050, 0051]) thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yona to change the composite image layout when the connected sites (users)

Art Unit: 2643

increases or decreases in order to reflect such changes and to allow the remaining conferees to view each other and know who is remaining in the conference.

As to claims 4, 5, 14-17, the above discussion regarding claims 2, 3 also apply and are incorporated by reference herein. Furthermore, the parameters read on the various composite image layout configurations as shown in Figs. 5, 8B.

16. Claims 2-8, 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terui.

As to claims 2, 3, since Terui discloses the layout is changed dynamically in the video conference, e.g. see Figs. 17A-17F, thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Terui to change the composite image layout when the connected sites increases or decreases in order to reflect such changes and to allow the remaining conferees to view each other and know who is remaining in the conference.

As to claims 4, 5, 14-17, the above discussion regarding claims 2, 3 also apply and are incorporated by reference herein. Furthermore, the parameters read on the various composite image layout configurations as shown in Figs. 5, 8B.

As to claims 6-8, Terui discloses the conference image layout comprise a 4, 9, 16 partition image layout, for example see Terui Figs. 17, 18, and Terui further discloses these image layout are dynamically switched in a video conference (e.g. see col. 1 line 8-13).

Art Unit: 2643

17. Claims 9-13, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers in view of Downs et al (US PAT. NO. 5,894,321 hereinafter Downs).

Rogers differs from the claimed invention in not disclosing the various parameters as claimed. However, it is old and well known in the art that conferencing parameters comprise bandwidth, and quality of the data is also dependent on the bandwidth, and is also known to select a common denominator to ensure data is received at all endpoints, for example see Downs col. 1 line 53 to col. 2 line 15. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rogers to change the conference parameters, e.g. bandwidth, image quality, etc., in order to provide a conference between all endpoints.

18. Claims 9-13, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yona in view of Downs et al (US PAT. NO. 5,894,321 hereinafter Downs).

Yona although discloses obtaining conference parameters Yona differs from the claimed invention in not disclosing the various parameters as claimed. However, it is old and well known in the art that conferencing parameters comprise bandwidth, and quality of the data is also dependent on the bandwidth, and is also known to select a common denominator to ensure data is received at all endpoints, for example see Downs col. 1 line 53 to col. 2 line 15. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yona to change the conference parameters, e.g. bandwidth, image quality, etc., in order to provide a conference between all endpoints.

19. Claims 9-13, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loui in view of Downs et al (US PAT. NO. 5,894,321 hereinafter Downs).

Loui differs from the claimed invention in not disclosing the various parameters as claimed. However, it is old and well known in the art that conferencing parameters comprise bandwidth, and quality of the data is also dependent on the bandwidth, and is also known to select a common denominator to ensure data is received at all endpoints, for example see Downs col. 1 line 53 to col. 2 line 15. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Loui to change the conference parameters, e.g. bandwidth, image quality, etc., in order to provide a conference between all users.

20. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers in view of Terui et al (US PAT. NO. 6,124,881 hereinafter Terui).

Rogers differs from the claimed invention in not disclosing the various image layouts as claimed. However, it is old and well known in the art that conference image layout comprise a 4, 9, 16 partition image layout, for example see Terui Figs. 17, 18, and Terui further discloses these image layout are dynamically switched in a video conference (e.g. see col. 1 line 8-13). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rogers to comprise the various image layout as claimed in order to accommodate for different or changing numbers of conference participants.

21. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loui in view of Terui et al (US PAT. NO. 6,124,881 hereinafter Terui).

Loui differs from the claimed invention in not disclosing the various image layouts as claimed. However, it is old and well known in the art that conference image layout comprise a 4, 9, 16 partition image layout, for example see Terui Figs. 17, 18, and Terui further discloses these image layout are dynamically switched in a video conference (e.g. see col. 1 line 8-13). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Loui to comprise the various image layout as claimed in order to accommodate for different or changing numbers of conference participants.

22. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yona in view of Terui et al (US PAT. NO. 6,124,881 hereinafter Terui).

Yona differs from the claimed invention in not disclosing the various image layouts as claimed. However, it is old and well known in the art that conference image layout comprise a 4, 9, 16 partition image layout, for example see Terui Figs. 17, 18, and Terui further discloses these image layout are dynamically switched in a video conference (e.g. see col. 1 line 8-13). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yona to comprise the various image layout as claimed in order to accommodate for different or changing numbers of conference participants.

Art Unit: 2643

23. Claims 9-13, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terui in view of Downs et al (US PAT. NO. 5,894,321 hereinafter Downs).

Terui differs from the claimed invention in not disclosing the various parameters as claimed. However, it is old and well known in the art that conferencing parameters comprise bandwidth, and quality of the data is also dependent on the bandwidth, and is also known to select a common denominator to ensure data is received at all endpoints, for example see Downs col. 1 line 53 to col. 2 line 15. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Terui to change the conference parameters, e.g. bandwidth, image quality, etc., in order to provide a conference between all endpoints.

24. Claims 9-13, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson.

Nelson in section [0055] discloses that the video transcoding method perform video scaling, resolution and bitdepth conversion, etc., thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson to change the conference parameters, e.g. bandwidth, image quality, etc., in order to provide a compatible conference between all endpoints.

25. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Terui et al (US PAT. NO. 6,124,881 hereinafter Terui).

Nelson differs from the claimed invention in not disclosing the various image layouts as claimed. However, it is old and well known in the art that conference image layout comprise a 4, 9, 16 partition image layout, for example see Terui Figs. 17, 18, and Terui further discloses these image layout are dynamically switched in a video conference (e.g. see col. 1 line 8-13). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson to comprise the various image layout as claimed in order to accommodate for different or changing numbers of conference participants.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wing F. Chan whose telephone number is 571-272-7493. The examiner can normally be reached on Monday to Friday from 9 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wing F. Chan
Primary Examiner
Art Unit 2643